blueMatic EAV
Automatic Locking System with Motor Operated Opening

Operating Manual

After installation please pass on these instructions to the end customer. (Disclosure obligation stipulated in the Product Liability Act.)

This security door locking system complies with the requirements and directives established and stipulated by the Council on the Harmonization of Legal Regulations of Member States regarding Electromagnetic Compatibility (89/336/EEC).

The manufacturer shall hereby certify the conformity of this product and document such by the CE marking (see Appendix).

Aug. Winkhaus GmbH & Co. KG

Berkeser Straße 6
D-98617 Meiningen
Germany
T +49 (0) 3693 950-0
F +49 (0) 3693 950-134
www.winkhaus.de

The following information and graphic images provided correspond to the current status of the development and manufacture of this product.

For the purpose of customer satisfaction and operational reliability of the automatic locking system with motor operated opening , we reserve the right to make changes to this product without notice.

All information and specifications given in this operating manual have been compiled and reviewed with the utmost care.

Due to the nature of advances in technology, or amendments to legal regulations and other compulsory changes we do not guarantee the accuracy and completeness of the contents' statements. We always appreciate suggestions or comments.

The automatic locking system with motor operated opening can be easily installed, if these operating instructions and the door specifications indicated have been adhered to.

Table of contents

1	Important information		page 5
	1.1	General information	page 5
	1.2	Intended use	page 5
	1.3	Use contrary to the intended purpose	page 6
	1.4	Explanation of symbols	page 7
	1.5	Important safety information	page 7
	1.6	Abbreviations/Explanations	page 8
2	Product description		page 9
3	Installation		page 18
	3.1	Routing details	page 18
	3.2	Cable transition KÜ-T-STV (plug-in)	page 19
	3.3	Installations	page 22
	3.3.1	General connection diagram	page 23
	3.4	Access control system transponder set	page 24
	3.5	Access control system wireless remote control	page 26
	3.5.1	Wireless remote control set	page 26
	3.5.2	Wireless receiver (separate)	page 28
	3.6	Non-Winkhaus access control system	page 30
	3.6.1	Non-Winkhaus access control system general	page 30
	3.6.2	Non-Winkhaus access control system finger sanner ekey home integra	page 30
	3.6.2.1	Control of additional applications (only integra 2)	page 32
	3.6.2.2	Control of automatic door opener (integra 1 and 2)	page 32

Table of contents

4	Operation/Programming		page 33
	4.1	blueMatic EAV	page 33
	4.1.1	Locking and unlocking	page 33
	4.2	blueMatic EAV with transponder	page 33
	4.2.1	Operation	page 33
	4.2.2	Programming	page 34
	4.3	blueMatic EAV with wireless remote control	page 36
	4.3.1	Operation	page 36
	4.3.2	Programming	page 36
	4.4	Wireless receiver for additional applications (e. g. garage door control units)	page 40
5	Maintenance and care		page 41
6	Errors/Causes/Troubleshooting		page 42
7	Technical specifications		page 43
	7.1	Power supply	page 43
	7.2	Antenna/Reader unit	page 44
	7.3	Wireless remote control	page 44
	7.4	Cable transition KÜ-T ...	page 45
8	Accessories		page 46

1 Important information

1.1 General information

Dear Customer,

We would like to thank you for your confidence you have put in us by purchasing our high-quality product.
Please read this operating manual carefully to become acquainted with the installation and use of this security door locking system and to avoid malfunctions and safety hazards.

VdS Acceptance class A
„Acceptance-No.: M105301“

1.2 Intended use

The automatic locking system with motor operated opening and the Winkhaus components recommended are suitable for the following areas of application:

- relative air humidity of max. 95%
- ambient air temperature of between - 20°C and + 60°C.

The complete door fittings are designed to be used in conjunction with genuine Winkhaus parts. Other parts which are not recommended by Winkhaus can adversely affect the default properties of this locking system. It is assumed that the lock will be used as intended.
The proper functions of the access control systems and the accessories included in the scope of delivery of the Winkhaus company have been tested. If you use components made by other companies and if you have any doubts about the suitability of these components, you will have to contact the respective manufacturer to ensure their fitness for use.

To ensure the intended use:

- the information and instructions required for this purpose have to be passed on to the respective persons;
- only trained professionals should install the door fittings, locking units and accessories according to the installation instructions. DIN standards, which may also apply are to be followed, also.

The stipulations for use as intended have been met, once the Winkhaus fittings are:

- installed according to their defined function and the installation specifications,
- not used in any other way than described,
- maintained and cared for at regular intervals as instructed, and/or defined sliding places oil at least 1 x annually (like e.g. chamfer of latch, automatic tracer pin ...) if necessary more frequently,
- not used if signs of wear are detected,
- repaired by trained professionals in the event of malfunctions.

The supplier/manufacturer does not accept any liability for personal injury or material damage caused by incorrect operation or improper use.

1.3 Use contrary to the intended purpose

The locking systems are not designed to absorb or compensate for any movement changes or in the closing mechanism of the door caused by changes in temperature or in the structure of the building.
Doors which are used in damp rooms and in environments with aggressive corrosion related air conditions require special door furniture.

Incorrect use of the locking systems is evident if :

- the instructions on the intended use are not being followed;
- the problem-free operation is hindered due to the installation of external items that are not suitable or block the external outside function, the locking system or within the center keep;
- the locking system or the center keep is manipulated in such a way that its design, mode of operation or function is changed;
- the door is drilled through in the area of the lock housings or of the lock rod once the lock has been installed;
- the additional opening and closing equipment or the thrown dead bolt are improperly used in order to keep the door open;
- force is used to drive the handle pin through the lock spindle;
- the locking components are wrongly installed or are tampered with, e.g. by painting over movable parts such as the lock dead bolt or latch;
- the locking system is subject to loads which exceed normal manual force and are transmitted via the cylinder key;

- the handle is not loaded in the normal sense of rotation or a a force above 150 N is applied onto the handle in the direction of actuation;
- the gap between the door frame and sash is increased or decreased, which would for instance result from readjusting the hinges or if the door drops;
- auxiliary lifting tools or objects are used to open or close the lock;
- the handle and the key are actuated simultaneously;
- the lock is locked/unlocked by using improper tools or equipment;
- Incorrect input values are applied in contravention of the Technical specifications.

1.4 Explanation of symbols

Symbols and flags are used to identify important information in this operating manual. Flags such as DANGER or CAUTION indicate the degree of hazard. Symbols serve to visually emphasize the message.
It is imperative that you follow the measures listed to avoid hazard to safety!

DANGER!
Danger to life or danger of serious injuries.

CAUTION!
Danger of material damage.

NOTICE!
Useful information and tips.

ECO-WATCH!
Notices on complying with regulations on environmental protection.

1.5 Important safety information

Safety information described in this section is to be diligently adhered to regarding the installation and use of this security lock. You must heed to the safety information provided without exceptions!

- Read the operating manual and keep it easily accessible for future reference. After installing the door pass it on to the end customer.
- The manufacturer shall not be held liable for damage caused by use contrary to the intended purpose of the product.

General information
1 Important information
2 Product description
3 Installation
4 Operation Programming
5 Maintenance and care
6 Errors Troubleshooting
7 Technical specifications
8 Accessories

- For security reasons, the lock has been designed to be used in conjunction with genuine Winkhaus parts. Using other parts may adversely affect the given properties of the security lock.
- It must be ensured that the door can be closed without any difficulties with the key.
- Installation/Repair of electrical equipment requires expertise, thus such work should only be carried out by a qualified electrician.
- Arbitrary modifications, changes or makeshift repairs are not permitted due to concerns for safety. You must only use genuine Winkhaus parts for replacements.
- The manufacturer shall only be held liable for security related properties of the locking system as stipulated within the bounds of statutory regulations, if the manufacturer himself or another instructed, authorized agent has carried out the maintenance and service work or made the changes.
- Winkhaus shall not be liable for any type of damage caused by inadequate repair or changes made.

1.6 Abbreviations/Explanations

The following terms and abbreviations are used in this manual:

STV	Security door lock	gr	grey powder coated
AV2	autoLock AV2 (Automatic locking system)	Reader	Reader unit/control unit of the transponder set
EAV	blueMatic EAV (Automatic locking system with motor operated opening)	AC	Alternating current
		DC	Direct current
		NO	Make contact
Handle	Door handle	NC	Break contact
Grt.	Set	NO-NC	Changer contact
SB FRA	Center keeps – latch/dead bolt/adjustment plate	ANT/GND	Auxiliary antenna/Ground
		UP-socket	Flush-type box
M2	with 2 hooks	LED	Light emitting diode
RS	DIN-right-handed	PE	Ground wire
LS	DIN-left-handed	N	Neutral wire
mc	Surface matt chrome-plated	L	Phase
est	stainless steel		

2 Product description

The blueMatic EAV (automatic locking system with motor operated opening) is a state-of-the-art locking unit for securing and locking entry doors in a contact-free manner. The hooks can be retracted electrically so as to open the door.

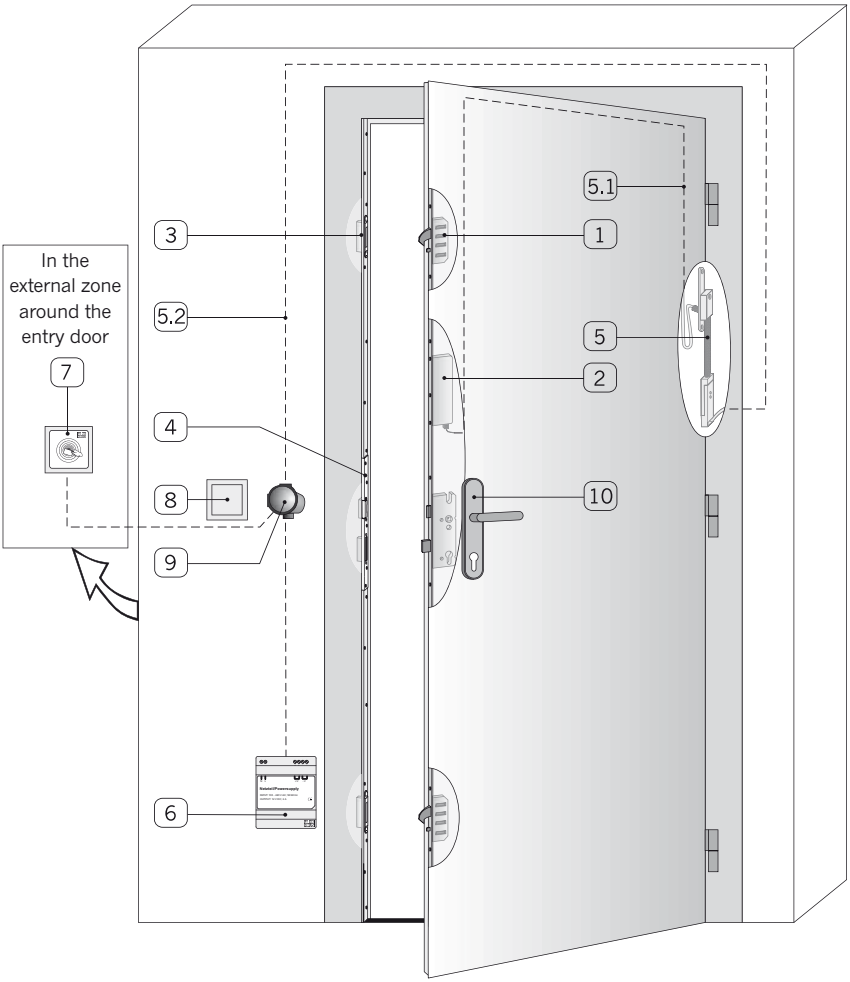


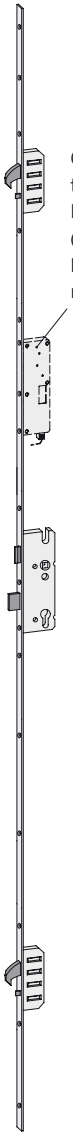
Figure 2-1: blueMatic EAV with accessories

General information
1 Important information
2 Product description
3 Installation
4 Operation Programming
5 Maintenance and care
6 Errors Troubleshooting
7 Technical specifications
8 Accessories

No.	Name	Included in standard delivery of the security lock	MUST! Mandatory*	Available as an accessory or as an option	Supplied by customer/not included in standard delivery
1	autoLock AV2 (Automatic locking system STV-AV2-F/U ...)	X	X		
2	Motor housing		X	X	
3	Extension keep set/single keep		X	X	
4	Center keep FRA ...		X	X	
5	Cable transition (KÜ-T-STV)		X	X	
5.1	Cable at the sash side 2 m [2.187 yd] or 3.5 m [3.829 yd] long, plug for motor housing included				
5.2	Cable for the frame side 4 m [4.374 yd] long				
6	Power supply 12 V DC/2 A			X	
7	Access control system (shown: antenna of the transponder set) ☞ **NOTICE! Only install the antenna of the transponder set in the external zone around the entry door!**			X	
8	„Open" button				X
9	Flush-type box				X
10	Handle				X

*remaining components recommended for use, or should be used alternatively

1 autoLock AV2 Automatic locking system



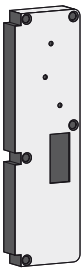
Automatic three-point locking system with safety protection against faulty switching, DIN RS and LS directions

Part Description	DIN right	DIN left
STV-AV2-F1660 L20/35 92/8 M2 rs/ls mc	235 212 2	235 213 1
STV-AV2-F1660 L20/35 92/8 M2 rs/ls gr	281 924 7	281 929 8
STV-AV2-F1660 L20/40 92/8 M2 rs/ls mc	235 230 9	235 240 5
STV-AV2-F1660 L20/40 92/10 M2 rs/ls mc	235 243 0	235 246 4
STV-AV2-F1660 L20/45 92/8 M2 rs/ls mc	235 215 7	235 216 5
STV-AV2-F1660 L20/45 92/8 M2 rs/ls gr	248 809 7	248 810 0
STV-AV2-F1660 L20/45 92/10 M2 rs/ls mc	235 249 9	235 250 1
STV-AV2-F1660 L20/50 92/8 M2 rs/ls mc	251 960 7	251 961 5
STV-AV2-F1660 L20/55 92/8 M2 rs/ls mc	235 217 3	235 218 1
STV-AV2-F1660 L20/55 92/10 M2 rs/ls mc	244 174 0	244 175 8
STV-AV2-F1660 L20/65 92/8 M2 rs/ls mc	241 602 6	241 603 4
STV-AV2-F1660 L20/65 92/10 M2 rs/ls mc	235 256 1	235 261 6
STV-AV2-F1660 L20/65 92/10 M2 rs/ls gr	493 468 2	493 468 3
STV-AV2-F2060 L20/35 92/8 M2 rs/ls mc	493 033 2	493 033 4
STV-AV2-F2060 L20/40 92/8 M2 rs/ls mc	235 265 9	235 268 3
STV-AV2-F2060 L20/45 92/8 M2 rs/ls mc	235 269 1	235 273 9
STV-AV2-F2060 L20/45 92/10 M2 rs/ls mc	235 275 5	235 277 1
STV-AV2-F2060 L20/50 92/8 M2 rs/ls mc	290 463 6	290 464 4
STV-AV2-F2060 L20/50 92/8 M2 rs/ls gr	252 065 9	252 066 7
STV-AV2-F2060 L20/55 92/8 M2 rs/ls mc	235 279 8	235 280 1
STV-AV2-F2060 L20/55 92/8 M2 rs/ls gr	248 938 1	248 939 9
STV-AV2-F2060 L20/55 92/10 M2 rs/ls mc	244 990 1	244 993 6
STV-AV2-F2060 L20/60 92/8 M2 rs/ls mc	295 964 5	295 965 3
STV-AV2-F2060 L20/60 92/8 M2 rs/ls est	290 126 7	290 129 1
STV-AV2-F2060 L20/60 92/10 M2 rs/ls mc	235 281 9	235 287 8
STV-AV2-F2060 L20/60 92/10 M2 rs/ls gr	254 137 0	254 138 8
STV-AV2-F2060 L20/65 92/8 M2 rs/ls mc	235 290 7	235 292 3
STV-AV2-F2060 L20/65 92/10 M2 rs/ls mc	235 300 2	235 301 1
STV-AV2-F2460 L20/35 92/8 M2 rs/ls mc	235 310 9	235 311 7
STV-AV2-F2460 L20/35 92/8 M2 rs/ls gr	291 457 8	291 454 3
STV-AV2-F2460 L20/35 92/8 M2 rs/ls est	253 409 0	253 410 2
STV-AV2-F2460 L20/40 92/8 M2 rs/ls mc	235 312 5	235 313 3
STV-AV2-F2460 L20/40 92/8 M2 rs/ls gr	244 996 1	244 997 9
STV-AV2-F2460 L20/40 92/8 M2 rs/ls est	296 829 3	296 830 6
STV-AV2-F2460 L20/45 92/8 M2 rs/ls mc	239 011 1	239 012 9
STV-AV2-F2460 L20/45 92/8 M2 rs/ls gr	494 183 3	494 183 4
STV-AV2-F2460 L20/45 92/10 M2 rs/ls mc	241 277 1	241 278 9

1 autoLock AV2 Automatic locking system

Part Description	DIN right	DIN left
STV-AV2-F2460 L20/50 92/8 M2 rs/ls mc	295 320 1	295 321 9
STV-AV2-F2460 L20/50 92/8 M2 rs/ls est	253 411 1	253 412 9
STV-AV2-F2460 L20/65 92/8 M2 rs/ls mc	276 738 7	276 739 5
STV-AV2-F2460 L20/65 92/8 M2 rs/ls est	259 254 8	259 255 6
STV-AV2-U2260 L20/65 92/10 M2 rs/ls gr	293 515 0	293 516 8
STV-AV2-U2293 L20/35 92/8 M2 rs/ls mc	240 695 2	240 696 1
STV-AV2-U2293 L20/45 92/8 M2 rs/ls gr	239 520 2	239 521 1
STV-AV2-U2460 L20/35 92/8 M2 rs/ls mc	235 339 5	235 340 8
STV-AV2-U2460 L20/35 92/8 M2 rs/ls gr	253 049 4	253 050 7
STV-AV2-U2460 L20/35 92/8 M2 rs/ls est	253 417 0	253 423 3
STV-AV2-U2460 L20/35 92/8 M2 rs/ls ws	248 486 2	248 490 0
STV-AV2-U2460 L20/40 92/8 M2 rs/ls mc	235 350 4	235 351 2
STV-AV2-U2460 L20/40 92/10 M2 rs/ls gr	494 981 2	494 981 3
STV-AV2-U2460 L20/40 92/10 M2 rs/ls ws	494 981 0	494 981 1
STV-AV2-U2460 L20/45 92/8 M2 rs/ls mc	235 343 2	235 344 1
STV-AV2-U2460 L20/45 92/8 M2 rs/ls gr	241 346 6	241 347 4
STV-AV2-U2460 L20/45 92/8 M2 rs/ls est	254 369 1	254 370 3
STV-AV2-U2460 L20/45 92/10 M2 rs/ls mc	235 341 6	235 342 4
STV-AV2-U2460 L20/50 92/8 M2 rs/ls mc	253 849 6	253 850 9
STV-AV2-U2460 L20/50 92/8 M2 rs/ls est	253 421 7	253 424 1
STV-AV2-U2460 L20/55 92/10 M2 rs/ls mc	286 710 0	286 711 8
STV-AV2-U2460 L20/60 92/8 M2 rs/ls mc	255 964 1	255 965 0
STV-AV2-U2460 L20/65 92/8 M2 rs/ls mc	255 966 8	255 967 6
STV-AV2-U2460 L20/65 92/8 M2 rs/ls est	255 968 4	255 969 2
STV-AV2-U2460 L20/65 92/10 M2 rs/ls mc	255 554 4	255 555 2
STV-AV2-U2463 L20/35 92/8 M2 rs/ls mc	493 728 3	493 728 4
STV-AV2-U2471 L20/35 92/8 M2 rs/ls mc	235 347 5	235 348 3
STV-AV2-U2471 L20/35 92/8 M2 rs/ls gr	244 264 6	244 265 4
STV-AV2-U2471 L20/35 92/8 M2 rs/ls est	251 304 5	251 309 6
STV-AV2-U2471 L20/35 92/8 M2 rs/ls ws	248 399 1	248 402 9
STV-AV2-U2471 L20/45 92/8 M2 rs/ls mc	238 871 5	238 872 3
STV-AV2-U2471 L20/45 92/8 M2 rs/ls gr	247 222 1	247 223 9
STV-AV2-U2471 L20/45 92/8 M2 rs/ls mc	289 809 6	289 810 9
STV-AV2-U2471 L20/65 92/8 M2 rs/ls mc	283 192 4	283 193 2
STV-AV2-U2471 L20/65 92/8 M2 rs/ls est	291 798 0	291 799 8
STV-AV2-U3077 L20/65 92/10 M2 rs/ls mc	299 036 0	299 037 8

2 Motor housing



Motor housing for powered unlocking, including control, but without cable

- for transponder or wireless remote control
- switching unit for automatic door opener via floating contact
- available mounted or separate

STV-Motor housing EAV [1]	240 992 6
STV-G3 motor housing EAV mounted [2]	240 999 3
STV-Motor housing EAV (auto door opener) [3]	241 022 2
STV-G3 motor housing EAV (auto door opener) mounted [2] [3]	241 023 1

[1] to retrofit simply screw to the autoLock AV2 (automatic locking system)
Caution! Pay attention to left-handed thread!

[2] if an autoLock AV2 + motor housing EAV, mounted, are simultaneously ordered ➜ supply of the locking system will have the mounted motor housing

[3] incl. signal (floating contact) for automatic door opener

NOTICE! Please observe the following instructions when using a automatic door opener:

- **Ensure that the motor can open the closing leaf at any time.**
- **After unlocking, the control unit sends a signal to the automatic door opener which must them open out immediately.**
- **If the automatic door drive is triggered at another point of time, malfunctions can be caused.**
- **If the main hook is unlocked manually, the door may not be actuated electrically.**

3 Extension keep set/single keeps

Select the corresponding standard frame parts in the current program manual (single keeps/alternatively extension keep set):

Program Manual Wood/PVC/ALU 12/2008	493 476 7
Program Overview keep wood	Group 2
Program Overview keep PVCu/Vinyl	Group 2
Program Overview keep aluminum	Group 2

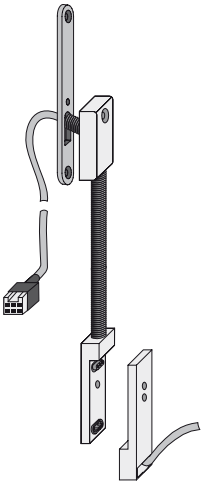
(Example: profile INOUTIC; frame L30; sash H40 ➜ extension keep set U26-192)
When ordering always indicate the DIN direction RS or LS.

4 Center keep FRA

Center keep for latch and dead bolt of PVCu/Vinyl, aluminum and wood/Composite entrance doors.

Select the respective keeps according to the profile systems in the current program manual (see above).

5 Cable transition KÜ-T-STV



Plug-in and lying buried cable transition

- Inserted by plug-in function with retaining screws
- sash part with spring jacket and cable of 2 m [2.187 yd] or 3.5 m [3.829 yd] (plug for motor housing included)
- for STV-SET KÜ-T-integra-EAV sash part with spring jacket and cable of 1 m [1.094 yd] (cable end with 8-pole plug)
- frame part with cable of 4 m [4.374 yd]
- lying buried in the airgap
- used as the electric interface (max. 24 V DC/2 A) between the sash of the door and the frame
- color silver/grey
- it must not be relieved for 11 mm airgap [0.433"], suitable for PVCu and aluminum entrance doors (depends on the system)
- **Recommendation:** For wooden doors (if applicable also for PVCu/Vinyl or aluminum doors) use the cover plate F16/F20, to hide the routering for the cable hole, and to prevent cable damage

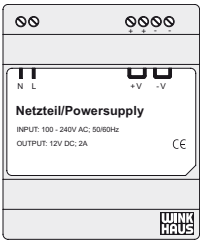
STV-Cable transition KÜ-T-STV FL 2 m [1)]	234 148 2
STV-Cable transition KÜ-T-STV-FL 3.5 m [2)]	493 042 7
STV-SET Cable transition KÜ-T-integra-EAV FL 1 m + cable 2 m [3)]	493 805 0
STV-Cover plate F16 for KÜ-T-STV	275 846 4
STV-Cover plate F20 for KÜ-T-STV	274 764 2

1) for use with EAV (if applicable BM), sash part 2 m cable + plug for motor housing

2) for use with EAV (if applicable BM), sash part 3.5 m cable + plug for motor housing

3) for use with EAV and finger scanner ekey home integra, sash part 1 m Kabel + 8-pole plug for control unit ekey home integra

6 Power supply



Power supply unit for blueMatic EAV: 100 - 240 V, 50/60 Hz, 12 V DC, 2 A, to be installed on a top hat mounting rail

STV-Power supply 12 V DC/2 A	246 977 7

NOTICE!
Operation of a second EAV with the same power supply is not possible. Suitable for additional appliance (e. g. fingerscanner ekey home integra), but follow their power requirements (see the next notice).

CAUTION! It is not allowed to load the power supply with more than 2 A when using EAV + access control system!

NOTICE!
Unless you are using a Winkhaus power supply unit, please keep in mind the following information:

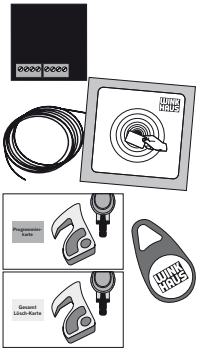
- **exclusively for EAV: 12 V DC (direct current), stabilized, min. 1,5 A**
- **raise the power by the need of the additional component (1,5 A + power of the additional component) when using EAV + access control system (e. g. finger scanner)**

7 Access control systems

From the outside the door is opened via the access control system (transponder, wireless remote control).

NOTICE!
VdS acceptance: Only with VdS-tested access control systems!

Transponderset EAV

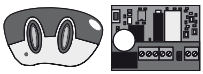


Consisting of:

- 1 reader/control unit (for flush-type box)
  - mounting of the reader on the inside
- 1 antenna for exposed installation (90 x 90 x 13 mm, [3.543 x 3.543 x 0.512"], color white), cable of 2.5 m [2.734 yd] fixed at the antenna
- 1 antenna sticker, weatherproof, resistant to UV light
  - mounting of the transponder antenna on the outside
- 3 transponder chips (blue chips are unprogrammed)
- 2 progamming cards transponder
  (programming card = green; delete-all card = red)

STV-Transponderset T02 EAV	241 026 5

Wireless remote control set



Consisting of:

- 1 wireless receiver (to be inserted in the flush-type box)
  - mounting of the remote control receiver on the inside
- 3 remote controls (programmed, color: dark grey/grey)
- programming instruction + connection diagram

STV-Wireless remote control F02, dark grey, set 3+1	241 027 3

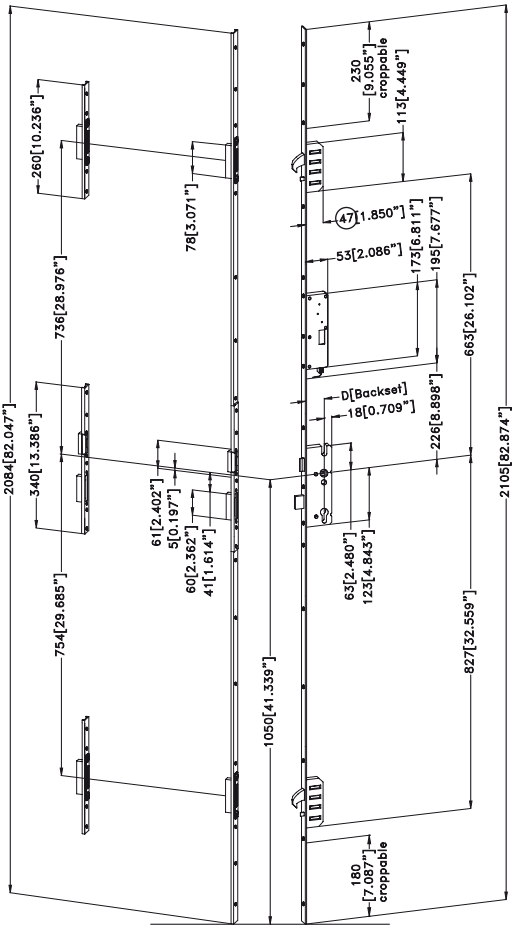
NOTICE!

You have to connect the following parts directly with the door opener when using/connecting a door opener: varistor at AC/free-wheeling diode at DC Reason: Protection of the relay from wear.

3 Installation

3.1 Routing details

For installing the blueMatic EAV it is required to rout out for standard three-point locking system and additionally the motor housing, as shown in the following diagrams.



NOTICE!
Important for wood/ composite entrance doors: Please enlarge the routing for the additional lock housings up to 47 mm [1.850"]!

Figure 3.1-1: Dimensions for blueMatic EAV

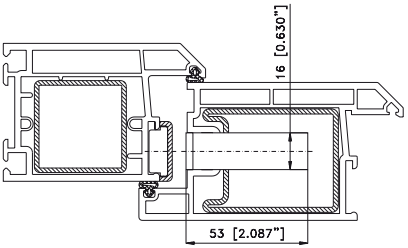


Figure 3.1-2: Location of the motor housing for blueMatic EAV

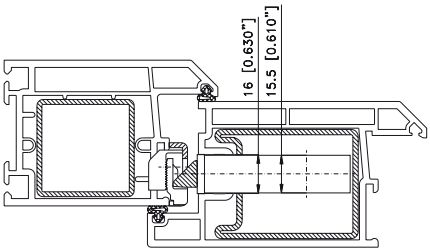


Figure 3.1-3: Location of the main lock housing for blueMatic EAV

NOTICE!

a) **The routing for the main lock housing must be 16 mm [0.630”] as minimum to provide for free motion of the drive rod! Check the door euro groove for sprue so that the free motion of the rod is not impeded!**

b) **It is imperative to use always with a Lever/fixed pad handle set (lever inside, door knob outside).**

3.2 Cable transition KÜ-T-STV (plug-in)

Recommendation: For wooden doors (if applicable also for PVCu/Vinyl or aluminum doors) use the cover plate (4) F16/F20, to hide the routering for the cable hole, and to prevent cable damage.

Installation sequence:

Frame part A (5.1):

- Drill a hole with a Ø of 6 mm through the door frame
- Pass the cable through the door frame
- Fasten the part A (5.1) with the fitting screw (1) having a Ø 4 x 25 mm

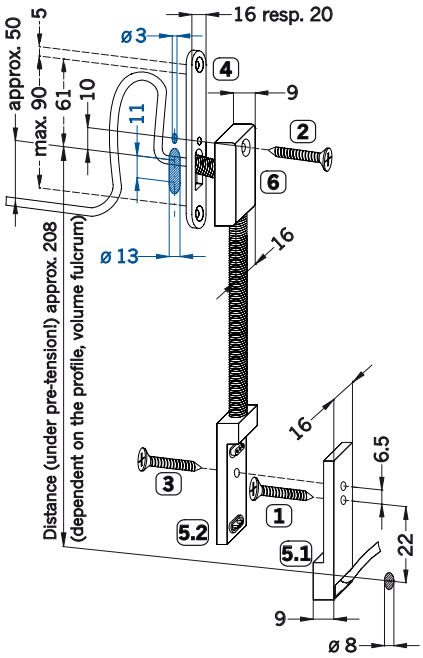


Figure 3.2-1: Routing dimensions for cable transition KÜ-T-STV (Measures in mm)

1	Fitting screw
2	Fitting screw
3	Fitting screw
4	Cover plate
5.1	Frame part A
5.2	Frame part B
6	Sash part

Sash part 6:

- If cover plate 4 is used, mill slotted oblong hole 90 mm (see Figure 3.2-1, deep with wood doors approx. 50 mm)
- **Alternatively:** With use without cover plate, drill a hole 2 x Ø 13 mm resp. oblong hole through the euro groove (approx 208 mm vertically over the frame part drill hole of Ø 8 mm) and for screw 2 pre-drill (Ø 3 mm), **blue** represented

CAUTION! The drillings must be burr-free. The spring must be kept under a slight pre-tension even with the door being closed (ca. 10 mm).

- Necessary execution drillings (Ø 13 mm) in the sash attach (e.g. in the glazing chamber)
- Pass the cable with the plug for the motor housing through the door sash
- Insert the end of the spring into the sash part 6 into the drilling/reaming into the door sash/cover plate are
- And/or alternatively to the cover plate with screw M4 x 12 mm fasten the sash part 6 with fitting screw 2 Ø 4 x 25 mm in the fitting groove
- Install the cable for example within the glazing chamber towards the motor housing; install the rest of the cable for example within the hollow section

NOTICE! Provide cable slack of about 3 - 5 cm [1.181 - 1.969”] for the spring tension behind the sash part of the cable transition.

- Complete the plug-in connection after putting the door on its hinges
- Fix frame part B [5.2] with the fitting screw [3] having a Ø of 4 x 25 mm

CAUTION! Release the second retaining screw [3] (e. g. during the installation of the door frame into the reveal) when unhinge the door sash! Insulate the wires not used!

Cover plate F16 or F20 for KÜ-T-STV

For wooden doors use the cover plate F16/F20, to hide the routering for the cable hole, and to prevent cable damage. The routing for this wire hole should be approx 50 x 90 mm [1.968 x 3.543”].

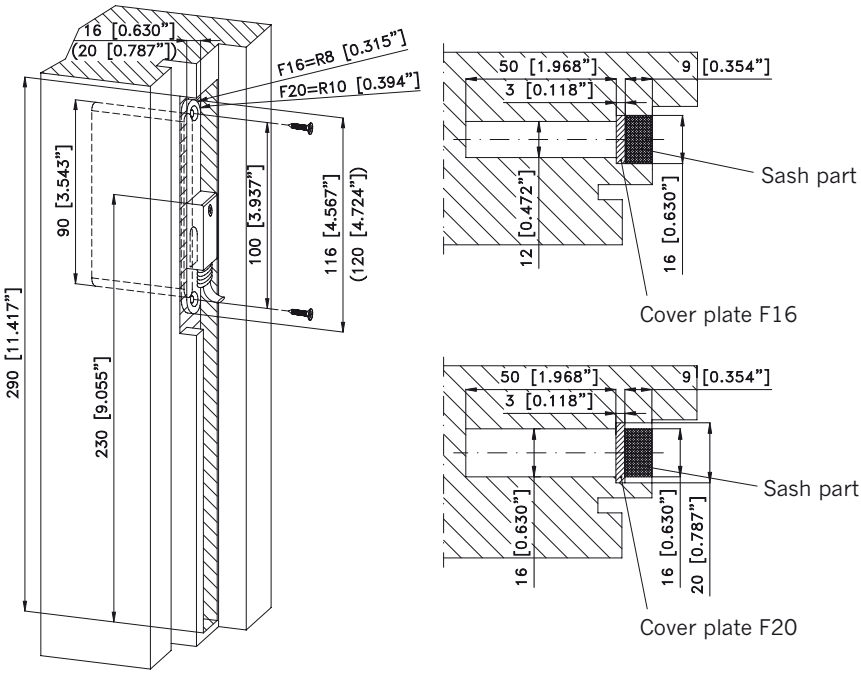


Figure 3.2-2: Routing dimensions for cable transition KÜ-T-STV

3.3 Installations

DANGER!
The installation of electrical equipment requires expertise, thus such work should only be carried out by qualified electricians.

DANGER!
Generally assemble and install only with the power off!

CAUTION!
The Door must easily lock mechanically before checking the electric function! If you connect an intercom system take care that the button of this system is designed as a potential free contact! External voltage must not be transmitted from the intercom system to the lock!

If the operating voltage has been applied (start-up), the motor brings the locking points into the neutral position.

3.3.1 General connection diagram

Recommendation: flush-type box or junction box for cable connection

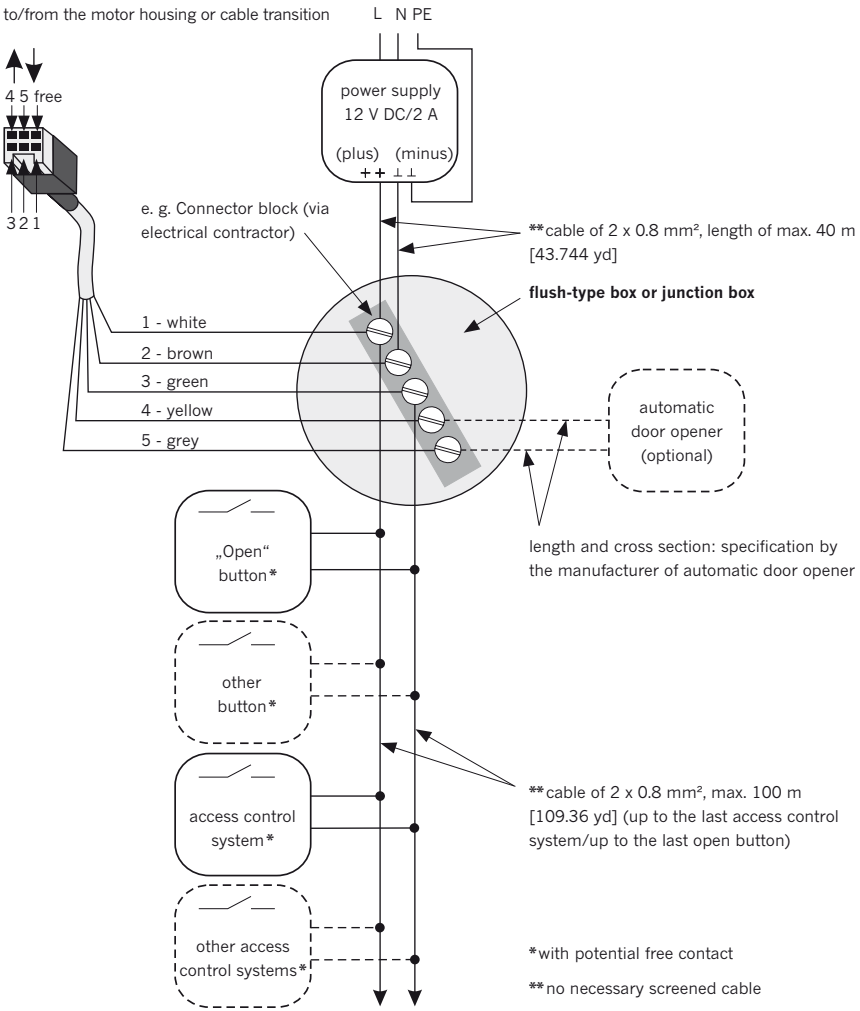


Figure 3.3.1-1: General connection diagram

3.4 Access control system transponder set

Prerequisites for installation:

- The transponder signal is processed in the reader/control unit.
- This unit has to be installed in a standard flush-type box inside the building (close to the door).

NOTICE!

Should you want to accommodate the control unit and button in the same flush-type box, this must have a depth of 65 mm [2.559”].

- Unless you use a button beside the door, you will have to install a flush-type box with a filler panel for the reader unit.

DANGER!

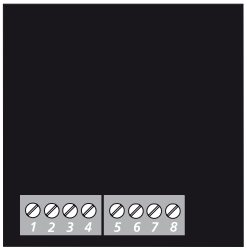
For safety reasons, do not install it in a flush-type box with a 230 V switch or socket outlet!

- The transponder antenna is located in a housing for exposed installations and is to be installed in a weatherproof zone outside the entrance door.
- Do not install the antenna directly on metal as its range could be decreased drastically.
- Do not install any other antenna within a radius of 1 m [1.094 yd]!

NOTICE!

If you plan installations on a metal substructure, you will have to use a wooden board and spacer bolts, if applicable, or large bore holes to ensure the proper function of the antenna! To test the scanning performance, you may have to tentatively install it on site, if applicable!

- Connect the cable of the antenna to the reader/control unit.
- We recommend: Lay a reserve pipe from the antenna to the reader unit.



No.	*Terminals*
1	„12 V DC“
2	„0 V DC“
3	serial interface
4	serial interface
5	antenna
6	antenna
7	potential free contact C
8	potential free contact NO

Figure 3.4-1: Terminal assignment of the transponder reader

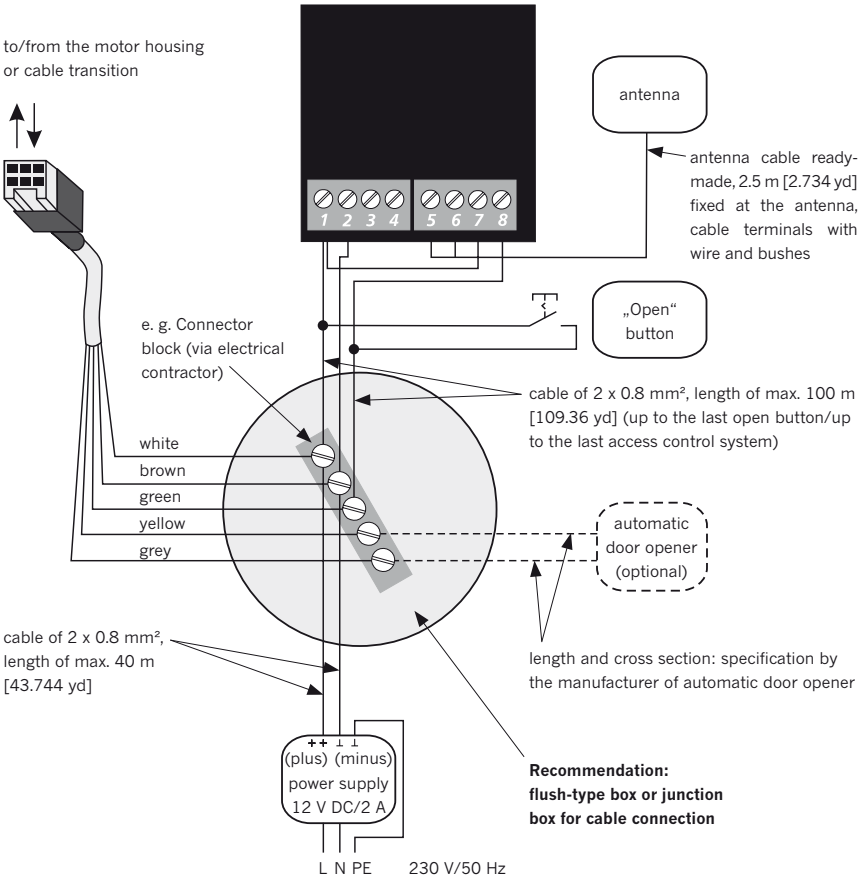


Figure 3.4-2: Installation of the transponder reader

3.5 Access control system wireless remote control

Prerequisites for installation:

- To ensure the reliable performance, the position of the wireless receiver is of utmost importance for the received power.
- Do not install it at or nearby sources of possible interference (e.g. EDP/high-performance power distributor).
- To prevent manipulation of the receiver we recommend installing the receiver on the inner side of the door!

3.5.1 Wireless remote control set

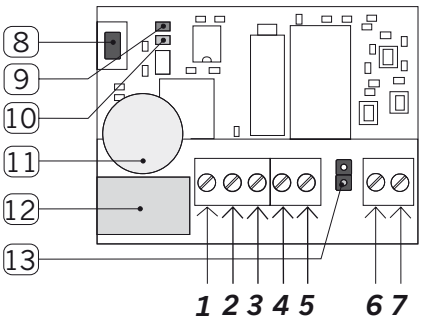
Installation sequence:

- Install the wireless receiver in a standard flush-type box on the inside.
- Unless you use a switch or button beside the door; you will have to provide a flush-type box with a filler panel for the wireless receiver.

NOTICE! If you use the flush-type box of the button, the box will have to be 65 mm [2.559"] deep!

DANGER! For safety reasons, you are not permitted to install it in a flush-type box with a 230 V switch or socket outlet!

- Connect the terminals 2 through 5 of the wireless receiver as described in the table below.



No.	Terminals
1	„Break contact (NC)", is not required
2	connect „Contact (C)" - to the green wire at the cable transition
3	connect „Make contact (NO)" - to terminal 4 of the wireless receiver (+ 12 V DC)
4	connect „12 V DC or 24 V DC" - with the white wire of the cable transition + terminal 2 of the wireless receiver
5	Connect „0 V DC" - with the brown wire of the cable transition
6	„Auxiliary antenna/ANT" (not required)
7	„Auxiliary antenna/GND" (not required)

Figure 3.5.1-1: Terminal assignment of the wireless receiver

No.	Name	No.	Name
8	„P1 button“	11	„buzzer“
9	„green LED“	12	„relay“
10	„red LED“	13	„jumper“ 12 V/24 V

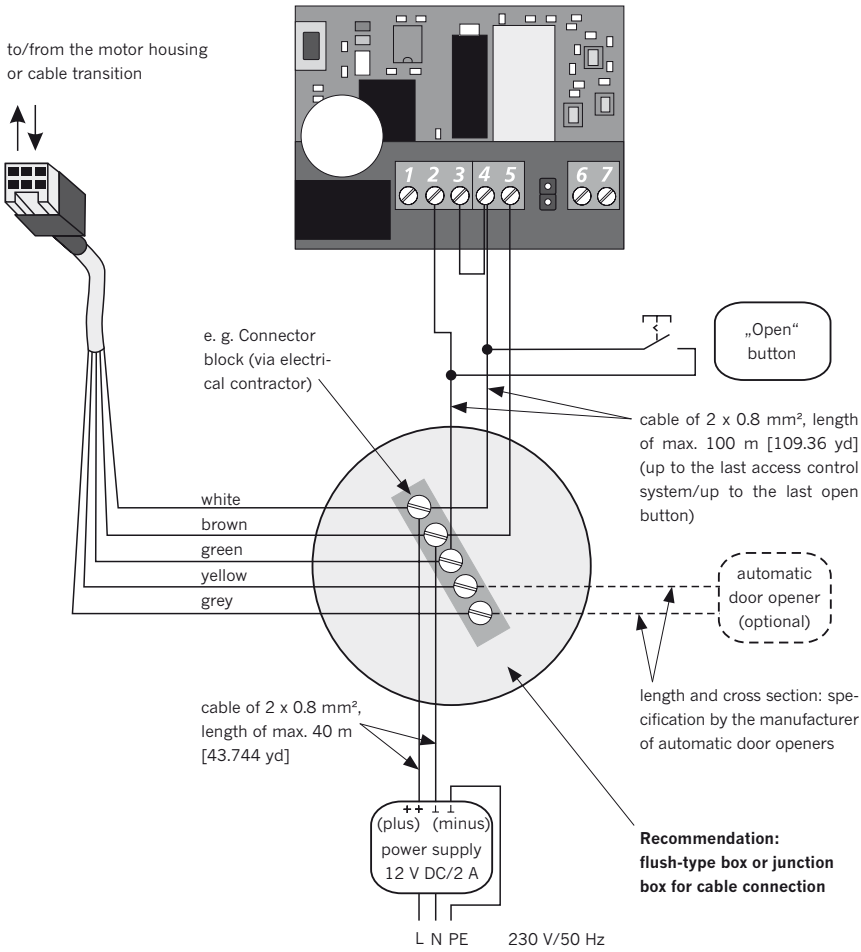


Figure 3.5.1-2: Installing the wireless receiver

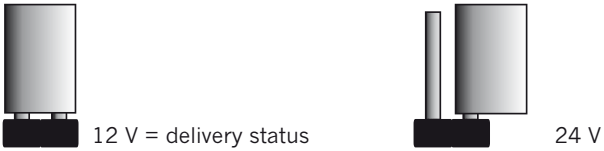


Figure 3.5.1-3: Adjustment of the jumper for voltage selection

- The default setting of the jumper is 12 V.
- The wireless receiver can be adjusted from 12 V to 24 V via the jumper.

NOTICE! Check the proper position of the jumper before starting operation!

3.5.2 Wireless receiver (separate)

Separate wireless receiver for additional applications, such as garage door control units.

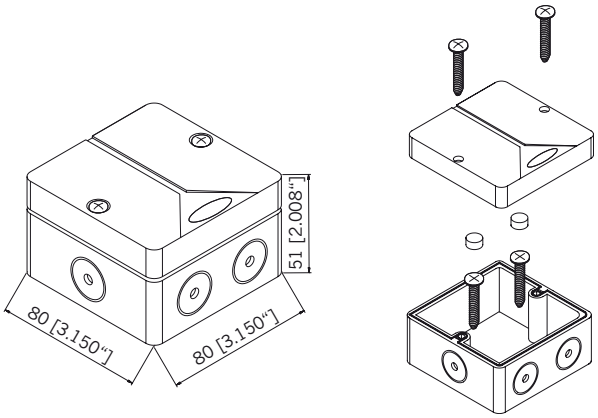


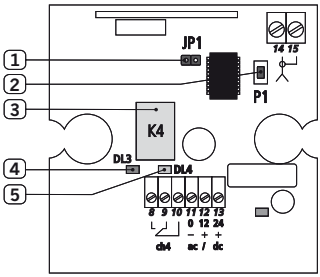
Figure 3.5.2-1: Installing the wireless receiver

Installation sequence:

- Remove the cover of the housing.
- Fasten the housing with screws.
- Push in the rubber plug (see Figure 3.5.2-1).
- Insert the circuit board of the remote according to figure 3.5.2-2 and connect it to the control of the additional application (for example to the garage door control unit).

NOTICE! Do follow the relevant installation instructions of the additional applications!

- Put the cover back on the housing and lock and screw it down.

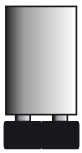


No.	Terminals
8, 9	NO relay K4 - non-operated contact is open, it closes by activating per remote control
9, 10	NC relay K4 - non-operated contact is close, it opens by activating per remote control
11, 12	„12 V AC/DC“
11, 13	„24 V AC/DC“
14	„Antenna“
15	„Screen“

Figure 3.5.2.-2: Terminal assignment of the circuit board of the receiver

No.	Name	No.	Name
1	„JP1 jumper“	4	„red LED“
2	„P1 button“	5	„green LED“
3	„K4 relay“		

- You can set the K4 relay as ON/OFF or as an impulse via the JP1 jumper (see figure 3.5.2-3). The setting depends on the control unit which is to be triggered by the receiver.



JP1 = ON
K4 ON/OFF

JP1 = OFF
K4 impulse

Figure 3.5.2-3: Setting the K4 relay

- Relay remains active after being activated by remote control.
- Deactivation by actuating the remote control once more.
- Relay becomes briefly active after being activated by remote control and after about 1 sec. it will be deactivated automatically.

3.6 Non-Winkhaus access control system

3.6.1 Non-Winkhaus access control system general

Please observe the following instructions when using other than the precalled systems to control the automatic locking system with motor operated opening (e. g. transponder set, wireless remote control):

- If several appliances (like access control + EAV) are operated together in the same door, you can use a common power supply with min. 1,5 A for EAV additionally the power requirement of the access control system. For this you need a stabilized 12 V DC direct current (chapter 2: product description power supply).
- Ensure that the decontrol signal takes place over a potential-free contact when using non-Winkhaus access control systems.
  If required use a coupling relay for realizing this.

3.6.2 Non-Winkhaus access control system finger scanner ekey home integra

Prerequisites for installation:

- The described access control system ekey home integra have to be installed into the door sash.
- If parallel to the access control another open signal (potential-free signal: e. g. „Open“ button, intercom, ...) should be used for unlocking, then it is possible via the cable transition KÜ-T-integra-EAV [1] (see figure: 3.6.1-1, detail B ➔ connection grey/brown).

Installation sequence:

- Plug-in the cable of the cable transition KÜ-T-integra-EAV [1] with 8-pole plug at the control unit ekey home integra [2] (terminal **X1**).
- Assembly connection between control unit ekey home integra [2] and finger scanner ekey home integra [3] via cable type A ekey home integra [6] with double sided plugs (terminal **X3**).

NOTICE! Control unit ekey home integra, finger scanner ekey home integra, cable type A ekey home integra included in standard delivery ekey.

- Assembly connection between control unit ekey home integra (2) and motor housing EAV (4). For this connect the wires of the cable of 2 m (included in delivery of the integra - EAV (5)) with terminal **X6** (see figure: 3.6.1-1, detail A). After this plug-in the blue plug into the motor housing.

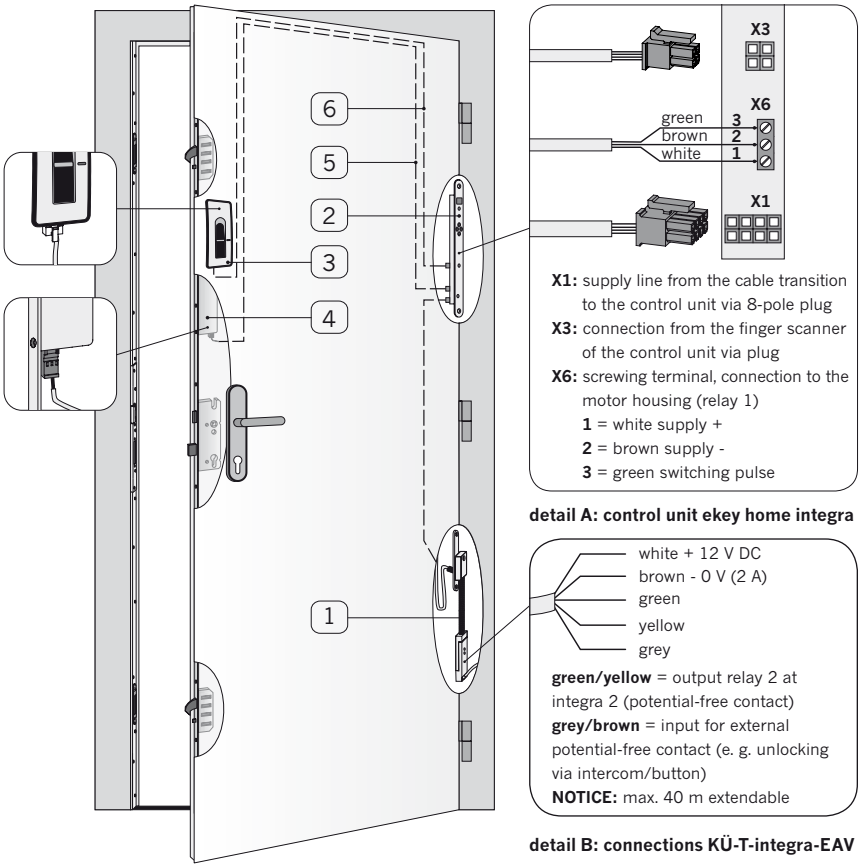


figure 3.6.1-1: wiring EAV and finger scanner ekey home integra

No.	Name
1	separable cable transition KÜ-T-integra-EAV
2	control unit ekey home integra
3	finger scanner ekey home integra

No.	Name
4	motor housing EAV
5	cable integra - EAV (2 m)
6	cable Typ „A“ ekey home integra (2 or 4 m)

3.6.2.1 Control of additional applications (only integra 2)

- The control of a additional application (e. g. garage door, alarm system) takes place via the second relay of the integra 2.
- This potential-free signal can be tapped at the wires green/yellow of the frame part of the separable cable transition KÜ-T-integra-EAV (1) (see figure 3.6.1-1, detail B ➔ connection green/yellow).

3.6.2.2 Control of automatic door opener (integra 1 and 2)

- You have to use a second cable transition (KÜ-T-STV-FL 3,5 m, item no. 4930427) when using a EAV with control of automatic door opener.
- You have to use the cable 3,5 m of the second cable transition (sash part) instead of the cable integra - EAV 2 m (5).
- Make a connection from the motor housing EAV (blue plug) to the control unit ekey home integra (length of min. 2 m) via this cable.
  If necessary disconnect the cable respectively remove the cable covering.
- You have to mount connector sleeves onto the wires white, brown, green and connect them at terminal **X6** as described on detail A.
- You have to connect the two remaining wires (yellow/grey) of the motor housing with the homochromatic wires (yellow/grey) of the second cable transition.
- Reconnect the cable by using wire connectors if it was disconnected.

NOTICE! For further information on ekey home integra please contact company ekey (www.ekey.net).

4 Operation/Programming

4.1 blueMatic EAV

4.1.1 Locking and unlocking

Locking:

- Even when closing the door it is automatically locked by two massive hooks and the latch in the main lock housing.
- Additional protection is provided by manual locking: one rotation of the key (1 x 360°) causes the dead bolt in the main lock housing to be thrown.

Opening the door from outside:

- Unlocking via the connected access control system (e. g. Transponder chip, wireless remote control) or with a key.

NOTICE! The main dead bolt for additional protection must be unlocked by keys in any case.

Opening the door from inside, e. g. via:

- the push-button
- the intercom (potential free button!)
- the handle or key (even possible in case of power failure)

4.2 blueMatic EAV with transponder

4.2.1 Operation

The reader unit controls and monitors the access to the door.

- It is operated by means of transponder chips that work contactless.
- Hold a programmed transponder chip within (0 - 8 cm, [0 - 3.150"]) of the antenna.
- Once the transponder chip is close enough to where it can read the information, communication is established contact free.

General information
1 Important information
2 Product description
3 Installation
4 Operation Programming
5 Maintenance and care
6 Errors Troubleshooting
7 Technical specifications
8 Accessories

- The transponder data is transmitted to the reader unit via the antenna.
- An acoustic signal at the reader unit will acknowledge the data transfer.
- The reader checks whether this ttransponder chip is authorized to access and allows or denies access.

Action	Acoustic Signal	Result
Door with transponder chip „Open“	■ ■ short, short	authorized

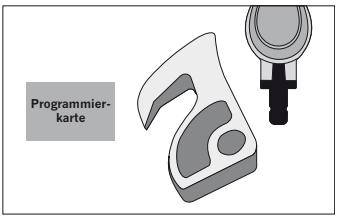
- After the enable time has elapsed, another fob can be recognized and evaluated.
- If a transponder chip is unknown to the reader, it does not have access rights and access will be denied.

Action	Acoustic Signal	Result
Door with transponder chip „Open“	■ ▬▬ short, long	not authorized

4.2.2 Programming

Each transponder set is supplied with 2 programming cards. (programming card = green; delete-all card = red) These cards are programmed to this reader/control unit.

Teach-in mode



Programming card: Set teach-in mode
➜ Teach Transponder chip

Action	Acoustic Signal	Result
Pass the programmable card over the antenna	■ short, every 0.5 seconds	teach-in mode „active“

NOTICE! If you do not swipe the transponder chip across the antenna for a period of 5 seconds, the teach-in mode will be stopped. The reader unit returns to operating mode.

Action	Acoustic Signal	Result
Pass all the transponder chips to be authorised in succession over the antenna	▬▬▬▬ for about 1 second	Transponder chips „authorised“
Pass all the transponder chips to be authorised in succession over the antenna	no acoustic signal (no more transponder chips can be authorised)	memory over (250 transponder chips have already been programmed)

Delete mode

Delete-all card: Delete mode „All transponder chips“ ➜ Deletes all transponder chips

CAUTION! By using the delete-all card all the transponder chips stored in the system will be deleted! The action of deleting all transponder chips is irrevocable once the process has been completed!
You have to teach up to 250 new transponder chips from the start!
The programming cards cannot open the door!

Action	Acoustic Signal	Result
Pass the delete-all card over the antenna	▬▬▬▬ for about 1 second	end of delete mode „All transponder chips“

NOTICE! All transponder chips have been deleted and the reader unit is at delivery status. The delete-all card and the programming card are saved, a transponder chip is not saved. In this state you cannot open the door via transponder chip or card; rather you will have to re-progamm the transponder chip.

NOTICE! Keep the programming cards at a safe place to prevent any kind of misuse. If you lose the cards, the reader unit will have to be exchanged in its entirety! Please contact customer service in such a case.

4.3 blueMatic EAV with wireless remote control

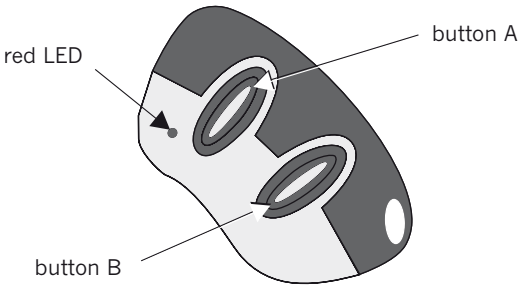
4.3.1 Operation

- It is operated via the wireless remote controls working contactless.
- The set of 3 wireless remote controls delivered have already been progammed (button A).
- To trigger a signal, press the A button of a progammed remote control. The red LED will turn on and the door will be unlocked.

4.3.2 Programming

You can program the wireless remote control via the wireless remote control or the wireless receiver. We recommend programming it by using the wireless remote control. The programming per remote control is not possible for the wireless receiver for additional applications.

Teaching a wireless remote control directly at the remote control (recommended)



NOTICE!
Keep the buttons pressed until you hear the acoustic signal at the receiver!

* If no remote control has been programmed (for example after „delete-all“ function), it would apply to all remote controls. The teach-in mode can be started with any remote control.

Deleting wireless remote controls directly via the remote control

HINWEIS!
Keep the buttons pressed until you hear the acoustic signal at the receiver!

Partial deletion:

Action	Acoustic Signal	Result
1) Press buttons A and B (of a programmed remote control) simultaneously *	■ brief	teach-in mode „started“
2) Press A button (of the same remote control)	■■■■■■■■■■ continuous signal (as long as delete mode is „active“)	teach-in mode „active“
3) Press all buttons to be deleted in succession, as long as the delete mode is „active“	■■■■ ■■■■ continuous signal is briefly interrupted	(pressed) button(s) is/are „deleted“

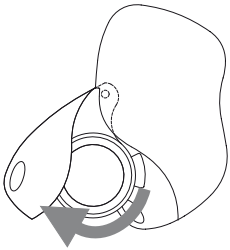
Delete-all:

Action	Acoustic Signal	Result
1) Press buttons A and B (of a programmed remote control) simultaneously	■ short	teach-in mode „started“
2) Press A button (of the same remote control)	■■■■■■■■■■ continuous signal (as long as the delete mode is „active“)	teach-in mode „active“
3) Press buttons A and B (of a programmed remote control) simultaneously	■ ■ ■ short, 3 times	memory of the receiver is „completely deleted“ (non programmed remote control)

Replacing the batteries in the wireless remote control

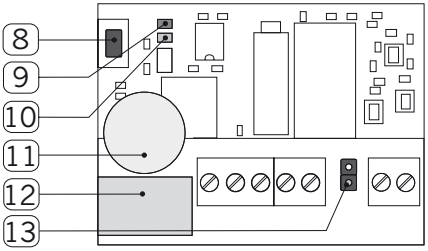
- At the button ring hole, pull the colored battery cover from the bottom of the remote control outwards.
- The battery compartment swings out.
- Replace the batteries.
- Insert two Lithium CR 2016.31 batteries.

NOTICE! Pay attention to the correct polarity!



ECO-WATCH! Properly dispose of the batteries as demanded by environmental regulation!

Teaching wireless remote controls directly via the receiver



8	„P1 button“
9	„green LED“
10	„red LED“
11	„buzzer“
12	„relay“
13	„jumper“ 12 V/24 V

- If the programming is performed via the receiver, this will have to be freely accessible.
- Press the P1 button of the receiver until the green LED lights up.
- Release the button.

- Activate the desired button of the remote control while the LED is lit up
- As long as the LED is lit, you can program additional remote control buttons.

Display Memory full: The memory has been filled to capacity (max. 85 buttons), if the teach-in button of a new wireless remote control is used and both LED displays of the receiver flash simultaneously.

Deleting wireless remote controls directly via the receiver

Partial deletion:
- Press and hold the P1 button of the receiver until the green LED lights up.
- Release the button.
- Press the button of the wireless remote control while the LED is lit up.
- A programmed wireless remote control will be deleted automatically.
- A wireless remote control that has not been programmed by this method will need a programming analogue „Teaching-in of wireless remote controls directly via the remote control“.

Delete-all:
- Press and hold the P1 button of the receiver until the green LED lights up.
- Release the button.
- Press the button again until the green and the red LED flash three times.
- Now, all remote controls are deleted.

ON/OFF mode:
- The default setting of the relay of the receiver is „Pulse“.
- You can program it as an ON/OFF relay for additional applications (specified by the respective application).
- For this purpose, press the P1 button of the receiver until the green LED lights up.
- Release the button again.
- Press the P1 button once more.
- The LED flashes and the relay is switched to the ON/OFF mode.
- Use the same procedure to get to the pulse mode.
- Then, the LED will be lit continuously.

Displaying the occupied memory units:

- Press and hold the P1 button of the receiver until the green LED lights up.
- Keep the button pressed until the LED goes off.
- Then release the button immediately.

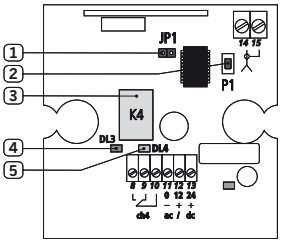
The display is a binary code: LED green = 1, LED red = 0

4.4 Wireless receiver for additional applications (e. g. garage door control units)

NOTICE!

The programming of remote controls via this receiver is not possible.

Programming via the wireless receiver (item no.: 2142897)



1	„JP1 jumper“
2	„P1 button”
3	„K4 relay ”
4	„red LED”
5	„green LED”

The wireless receiver saves the button of the wireless remote control in the sequence entered.

- To programm, press the P1 button of the circuit board of the wireless receiver.
- The green LED lights up.
- Release the P1 button.
- Then, press the button of the wireless remote control you would like to save.
- The LED turns off.
- The desired button of the wireless remote control has been programmed.

Deleting via the wireless receiver

Partial deletion:

- Press and hold the P1 button for about 2 seconds.
- When the green LED lights up, release the P1 button.
- Press the button of the wireless remote control you would like to delete.
- The deletion of the button is signaled by the flashing LED.

Delete-all:

- Press and hold the P1 button until the green LED lights up.
- Release the P1 button.
- When the LED lights, press the P1 button again until both LED flash three times.

The memory is full once 85 buttons have been saved in the wireless remote control. Now it is not possible to save additional wireless remote controls. This condition is indicated in the teach-in mode by both LED displays flashing simultaneously three times.

5 Maintenance and care

- Components of the door furniture relevant to security have to be checked for tightness and wear at regular intervals. If required, the retaining screws should be retightened and defective parts should be replaced.
- Check the locking mechanism and smooth operation of the security lock at regular intervals (at least once every three months).
- At least once a year - more frequently if under a higher stress factor - all moveable parts and all accessible sliding members of the locking system need to be lubricated with a light grease and checked for proper performance regarding mechanics and electronics.
- Tracer pin - depending upon demand - at least once per quarter with technical vaseline grease and mechanically for function examine.
- You should only use neutral cleaning agents or care products that do not contain any abrasives in order to protect the anticorrosion coat of the door furniture.
- Clean electronic parts only in a dry state.

6 Errors/Causes/Troubleshooting

Error	Indication	Possible cause	Troubleshooting
the door does not lock automatically	Hooks not engaged	• the door is warped • the contact pressure is too high • the door has not been installed properly	• check the installation, and the keep adjustment and alignment • adjust the hinge plates
the latch is „blocked“	the door is not latched in the center location	• the routing in the area of the main lock housing is possibly not sufficient (chapter 3)	• re-rout, if necessary
the door cannot be closed	the hook latch is „blocked“ in the single keep	• the door sash has not been mounted properly	• at the single keep ➜ change the height of the door keep (by using a screw driver)
the motor does not function although voltage is applied at the door	the door cannot be opened	• no voltage supply via the cable transition	• check the cable transition (e. g. contacts, screwed joint for KÜ-T-STV)
the door cannot be opened by the motor	the motor does not function	• power failure • power supply is interrupted, e. g. at the cable transition • System not wired correctly	• unlock mechanically via profile cylinder/handle or lock via profile cylinder • Check main power supply to transformer • check KÜ, correct the plugin connection (see above) • Check entire system agains wiring diagram
	the motor stops	• the door is warped • the contact pressure is too high • the lock is too tight	• adjust the door • check the operation via profile cylinder/handle
	the motor functions but the door cannot be opened	• the main bolt is unlocked via profile cylinder • Operating forces too high, faulty installation	• draw the main bolt back again via the profile cylinder • Check installation (keep alignment, air gap, etc.)

Error	Indication	Possible cause	Troubleshooting
Power failure when/ during:			
a) the door is locked			• the door can be operated mechanically (profile cylinder/handle)
b) the door is open, lock is unlocked	the door is possibly not held by the latch	• the motor is not in starting position	• close the door by prelocking the main bolt, if necessary
c) the unlocking procedure	when the door is locked again, possibly the hook, main bolt do not lock completely	• the motor is not in starting position	• door can be operated mechanically (profile cylinder/handle), if motor has returned to starting position ➜ completely functions
EAV does not operate with remote but LED is illuminating.	Door doesn‘t open	• Remote battery dead • Out of range to the remote control • Remote control not autthorized	• Replace battery in remote control • Operate remote control within 30 mtrs. (unostructed) • Check remote control programmed
Does not operate with remote control, red LED is not illuminating.		• Remote battery dead	• Replace battery in remote control

7 Technical specifications

7.1 Power supply

Primary voltage:	100 - 240 V AC; 50/60 Hz
Secondary voltage:	12 V DC stabilized
Current:	2 A
Dimensions:	77 x 92 x 55 mm [3.031 x 3.622 x 2.165”]
Weight:	approx. 0.3 kg
Installation:	top hat mounting rail

7.2 Antenna/Reader unit

Dimensions (antenna):	antenna housing: 90 x 90 x 13 mm [3.543 x 3.543 x 0.512"], for exposed installation, cable is permanently installed
Dimensions (reader):	45 x 45 x 22 mm [1.772 x 1.772 x 0.866"]
Reading distance:	between 0 and 8 cm [0 - 3.150"] (depending on the installation environment)
Signalization:	piezo-buzzer
Data memory:	max. 250 transponder chips
Reader technique:	Prox reader (EM 4102, Hitag)
Power consumption:	max. 100 mA
Voltage:	12 V AC/DC

7.3 Wireless remote control

Receiver type:	Superheterodyne
Modulation:	AM/ASK
Frequency:	433.92 MHz
Number of code combinations:	2 to the power of 64 („Rolling Code“)
Frequency of the local oscillator:	6.6128 MHz
Intermediate frequency:	10.7 MHz
Sensitivity (to receive signals):	-115 dB
Input impedance:	50 ohm
Maximum memory capacity:	max. 85 buttons
Power supply:	12/24 V AC/DC
Closed-circuit current:	10 mA
On-load current:	23 mA
Number of relays:	1 (NO-NC), output 24 VA
Dimensions (receiver):	44 x 33 x 17 mm [1.732 x 1.299 x 0.669"]
Range:	max. 30 meters [32.808 yd] (unobstructed area) 200 meters [218.72 yd] with antenna

Remote control

Number of operations:	2 channel
Power supply:	Lithium CR 2016.31 battery
Service life of batteries:	18 - 24 months
Power consumption:	13 mA
Frequency:	433.92 MHz

Number of code combinations:	2 to the power of 64 (as „Rolling Code“)
Modulation:	AM/ASK
Rated output E.R.P.:	50 - 100 µW
Range in an unobstructed area:	max. 30 m [32.808 yd]
Dimensions:	61 x 36 x 16 mm [2.402 x 1.417 x 0.630”]

Wireless receiver (separate)

Receiver type:	Superheterodyne
Modulation:	AM/ASK
Frequency:	433.92 MHz
Frequency of the local oscillator:	6.6128 MHz
Intermediate frequency:	10.7 MHz
Sensitivity (to receive signals):	115 dB
Input impedance:	50 Ohm
Maximum memory capacity:	85 codes for remote control
Power supply:	12/24 V AC/DC
Closed-circuit current:	15 mA
On-load current:	33/48 mA
Number of relays:	(1 NO-NC)
Power:	24 W
Dimensions:	80 x 80 x 50 mm [3.150 x 3.150 x 1.969”]

7.4 Cable transition KÜ-T ...

Measurements:	total component length of about 222 mm [8.740”]
Number of wires:	5
Cross section of wires:	0.25 mm²
Sash element:	• STV-KÜ-T-STV-FL 2 m with cable 2 m [2.187 yd] + plug for motor housing • STV-KÜ-T-STV-FL 3,5 m with cable 3.5 m [3.829 yd] + plug for motor housing • STV-SET KÜ-T-integra-EAV FL 1 m with cable 1 m, cable ends with 8-pole plug (for control unit ekey home integra)
Frame element:	with a cable of 4 m [4.374 yd]
Max. voltage:	24 V DC
Max. switching current:	2 A per connection line/wire

8 Accessories

Transponder chip

Transponder chip (separate) as an extension to transponder set EAV (241 026 5).

- form: key fob
- color: blue

STV-Transponder chip T01 blue	212 676 6

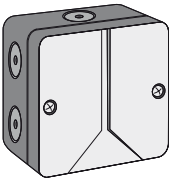
Wireless remote control

Wireless remote control (separate) as an extension to the wireless remote control set (241 027 3).

- color: dark grey/grey

STV-Wireless remote control F01 dark grey	212 678 2

Wireless receiver



Wireless receiver (separate); e. g. for coupling with the garage door control unit (the second button at the remote control can be used for this purpose)

STV-Wireless receiver F01	214 289 7

EC Declaration of Conformity

For the products:

blueMatic EAV

in the design:

Safety door locking system autoLock AV2 + motor control EAV 1 (mounted/not mounted)

we shall hereby certify that they conform to the requirements and directives established and stipulated by the Council on the Harmonization of Legal Regulations of Member States regarding Electromagnetic Compatibility (89/336/EEC).
The following standards have been applied to assess the electromagnetic compatibility of the product:

Emitted interference according to: **EN 61000 - 6 - 3**

Immunity to interference according to: **EN 61000 - 6 - 2**

This declaration is made on behalf of the manufacturer:

Aug. Winkhaus GmbH & Co. KG
Berkeser Str. 6
D-98617 Meiningen
Germany

and authorized by:

Meiningen, 09 July 2004

p.p.a. Dr. Warnow
Title: Technical Director

Aug. Winkhaus GmbH & Co. KG

Berkeser Straße 6
D-98617 Meiningen
T +49 (0) 3693 950-0
F +49 (0) 3693 950-134

www.winkhaus.de
tuertechnik@winkhaus.de